

## **ABSTRACT**

The present invention provides a nucleic acid sequence amplification method and apparatuses thereof that are simple in the design and easy to miniaturize and integrate into complex apparatuses, with capability of using DNA polymerases that are not thermostable. In the present invention, a plurality of heat sources are combined to supply or remove heat from specific regions of the sample such that a specific spatial temperature distribution is maintained inside the sample by locating a relatively high temperature region lower in height than a relatively low temperature region.